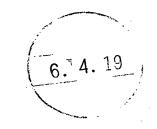
PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)
(PCT Article 36 and Rule 70)



Applicant's or agent's file reference S-20	FOR FURTHER AC	TION	See Form PCT/IPEA/416	5
International application No.	International filing date (a	lay/month/year)	Priority date (day/month	h/year)
PCT/JP2005/007196	07.04.	2005	08.04.	2004
International Patent Classification (IPC) or national classification and IPC Int.Cl. B23K20/12(2006.01), F02M21/02(2006.01), F17C1/02(2006.01), H01M8/00(2006.01), H01M8/04(2006.01), H01M8/06(2006.01)				
Applicant				
SHOWA DENKO K.K.				
This report is the international p Authority under Article 35 and tra				ninary Examining
2. This REPORT consists of a total		_	heet.	
3. This report is also accompanied b	y ANNEXES, comprisin	g:		•
a. a total of	sheets, as follows:			
sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the				
Supplemental Bo	ox.			
b. a total of (indicate type and number of electronic carrier(s)) containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).				
4. This report contains indications re	lating to the following it	ems:		
Box No. I Basis of the report				
Box No. II Priority				
Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability			oplicability	
Box No. IV Lack of unity of invention				
Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
Box No. VI Certain documents cited				
Box No. VII Certain defects in the international application				
Box No. VIII Certain observations on the international application				
Date of submission of the demand		Date of completion of this report		
31.10.2005		10.04.2006		
Name and mailing address of the IPEA/JP		Authorized officer	· · · · · · · · · · · · · · · · · · ·	3P 9257
Japan Patent Offic	æ	KATO, Masahito		
3-4-3, Kasumigaseki, Chiyoda-ku, Toky	3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan		-3-3581-1101 Ext.	3364

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2005/007196

Box No.	I Basis of the report		
1. Wi	ith regard to the language, this report is based of	on:	
V	the international application in the language i	n which it was filed	
	a translation of the international applica	ition into	, which is the language of a
	translation furnished for the purposes of:		
	international search (Rules 12.3(a) and		•
	publication of the international applicat	* * * * * * * * * * * * * * * * * * * *	
	international preliminary examination ((Rules 33.2(a) and/or 33.3(a))	
furi	h regard to the elements of the international nished to the receiving Office in response to an d are not annexed to this report):		
ᅜ	the international application as originally fi	iled/furnished	
	the description:		
	pages	:	as originally filed/furnished
	pages*	received by this Authority on	as originary mountainished
	pages*	received by this Authority on	
	the claims:		
	Nos.		as originally filed/furnished
	Nos.*	as amended (together wi	th any statement) under Article 19
	Nos.*	received by this Authority on	
	Nos.*	received by this Authority on	
	the drawings:		
shee	ets/figs		as originally filed/furnished
shee	ets/figs *	received by this Authority on	
shee	ets/figs *	received by this Authority on	
.	a sequence listing and/or any related table(s	s) - see Supplemental Box Relating to Sec	quence Listing.
3. 🔼	The amendments have resulted in the cance	ellation of:	
	the description, pages		
	the claims, Nos.		
	the drawings, sheets/figs		
	the sequence listing (specify):		
	any table(s) related to sequence listing	ng (specify):	
4. 🗖	This report has been established as if (some made, since they have been considered to (Rule 70.2(c)).		
	the description, pages		
	the claims Nos		
	Ti the december of the Alfine		
	the sequence listing (specify).		
	any table(s) related to sequence listin		
* If item	4 applies, some or all of those sheets may be n	marked "superseded."	

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2005/007196

. Statement			
Novelty (N)	Claims	1-17	YES NO
Inventive step (IS)	Claims	1-17	YES NO
Industrial applicability (IA)	Claims	. 1-17	YES NO
. Citations and explanations(Rule 70.	.7)		
		EING COMPANY)2002.04 Drawings(Family : Nor	•
		NORTH AMERICA, INC.)	
All Doo	cuments, All I	Orawings & JP 10-1600	
Document 3 : JP 9-42	2595 A (TOYODA	GOSEI CO.,LTD.)1997. Drawings(Family : Nor	02.14,
Document 3 : JP 9-42 All Doc	2595 A(TOYODA cuments, All I	GOSEI CO.,LTD.)1997. Drawings(Family : Nor	02.14, e)
Document 3 : JP 9-42 All Doc The subject matter of	2595 A(TOYODA cuments, All I	GOSEI CO.,LTD.)1997.	02.14, ne) ve an inventiv
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Occument 3 : JP 9-42 All Doc The subject matter of the document	2595 A(TOYODA cuments, All I	GOSEI CO.,LTD.)1997. Drawings(Family: Norse seems of the involute of the international seems of the in	02.14, we an inventiarch report.
All Door All Door The subject matter of the docume	2595 A(TOYODA cuments, All I	GOSEI CO.,LTD.)1997. Drawings(Family: Norse Sconsidered to involute the international se	02.14, we an inventi arch report.
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All Door The subject matter of the power the docume	esps A(TOYODA cuments, All I	GOSEI CO.,LTD.)1997. Drawings(Family: Nor s considered to invol- the international se	02.14, we an inventiarch report.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2005/007196

1.	Certain published documents (Rules 70.10)				
	Application No. Patent No.	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)	
	WO 2005/015074 A1 Γ _E , AJ	17.02.2005	06.08.2004	08.08.2003	
	JP 2004-209499 A	29.07.2004	27.12.2002		
	JP 2004-293785 A	21.10.2004	12.03.2004	13.03.2003	
	JP 2004-324781 A	18.11.2004	25.04.2003	·	

2.	Non-written disclosures (Rules 70.9)		
		•	Date of written disclosure
	Kind of non-written disclosure	Date of non-written disclosure	referring to non-written disclosure
	• <u>.</u>	(day/month/year)	(day/month/year)